

THE SOUTH-WEST AUSTRALIAN RACES OF THE SPOTTED SCRUB-WREN, *SERICORNIS MACULATUS*

By ERNST MAYR and ROBERT WOLK, The American Museum
of Natural History, New York.

In their *Systematic List of the Birds of Western Australia*, Whittell and Serventy write of this bird (page 77): "This species is in want of revision. At the moment no worthwhile indication of geographical races is possible." This remark encouraged us to try to determine the number of subspecies in South-West-Australia. Nine names are available for what seem to be five good subspecies.

We are particularly grateful to Mr. L. Glauert, Curator of the Western Australian Museum, for sending us 25 specimens from important localities for comparison and to Dr. D. L. Serventy for the loan of 9 additional specimens. It would not have been possible to complete this study without this generous assistance.

Past students of this species have tended to neglect two factors, wear and plumage differences, both of which strongly affect variation. Worn specimens, particularly from the semi-arid portions of the range of the species, may differ quite conspicuously from freshly moulted specimens. Likewise, there are much more pronounced differences between males and females and between adult first year birds and juvenals than is evident from the literature. Since the differences between the various plumages are very much the same for all the subspecies, they have been described in detail only for nominate *maculatus*.

Sericornis maculatus maculatus Gould

Sericornis maculatus Gould, 1847, *Proc. Zool. Soc. London*, p. 2—Albany, South-west Australia.

Sericornis maculata warreni Mathews, 1912, *Novit. Zool.*, 18 (1911), p. 356.—Warren River, Western Australia.

Range. The more humid districts of continental South-west Australia. On the south coast as far east as King George's Sound, on the west coast at least as far north as Perth. Specimens identified from Stirling Range, Albany, King George's Sound, Torbay, West Cape Howe, Wilson's Inlet, Warren River, Augusta, Cape Naturaliste, Vasse, Rockingham, Claremont, Rottnest Island.

Adult Male. Lores black; white superciliary line immediately above lores from base of bill to a point just behind the eye, bordered above and below by black; also a small white mark directly below the eye. A black line from the gape to the ear-coverts; below it a white malar stripe from the base of the lower mandible to the side of the neck. Chin white, throat and breast white with heavy black shaft streaks or linearly arranged spots; middle of abdomen clear pale yellow, flanks brown. Crown and back dark brown in fresh plumage, lighter, greyer in worn

plumage. Wings brown, greater and median upper wing-coverts and alula blackish, tipped with white. All tail feathers with black sub-terminal band, sometimes indistinct or absent on central pair; white tips on inner webs of three outer tail feathers.

Adult Female. Lores light brown. Streaking or spotting on the throat and breast thinner and not as well defined as in adult male.

1st Year Male. Sub-terminal tail band relatively indistinct. Contrast of black and white on wing coverts less than that of adult male. Lores black.

1st Year Female. Streaking or spotting on the breast does not reach as low an area on the belly as in the adult female. In fact, the markings are practically limited to the upper breast. Lores brown.



Distribution of the Spotted Scrub-wren, *Sericornis maculatus*. The dots, not distinguished by symbols, represent recorded sight observations of the species.

Juvenal. White superciliary shorter and less distinct than in adult. Brown of back duller, without grey or olive tints. Under parts white; throat and breast with small light brown spots or streaks; flanks light brown. Some birds are yellowish on the breast and belly. Lores brown. No white on tail.

Measurements (in millimetres)

Adult Male: Wing 50-58 (mean, 53.6), tail 44.5-50 (48.1).

Adult Female: Wing 50.5-56 (52.0), tail 43.5-51.5 (46.2).

1st Year Male: Wing 51.5-56, tail 46.

1st Year Female: Wing 51-55.5, tail 44-52.5.

Juvenal: Wing 50-53, tail 42.5-46.5.

Remarks. Mathews described *warreni* from the Warren River area as differing from *maculatus* in its darker head and greenish olive back, more pronounced spotting and yellow abdomen. In the material available, there is no significant difference between birds from various localities in humid South-western Australia. The intensity of the yellow on the abdomen and the tone of coloration of the upper parts vary individually. The yellow on the abdomen may be paler near the range of *condoni* but specimens from Albany still have the under parts distinctly yellow.

Sericornis maculatus condoni Mathews

Sericornis maculata condoni Mathews, 1942, *Journ. Roy. Soc., West. Australia*, 27: 78—Hopetoun, Western Australia.

Similar to *maculatus* but without any yellow on the underparts. Upper parts, face, tail and size as in *maculatus*.

Differs from *mondraini* by the whitish throat and breast with smaller black spots, by the more brownish hue of the upper parts, and by smaller size.

Range. South-eastern coast of South-west Australia from the Pallinup River to Israelite Bay.

The only available specimen of this race from the western point of its range (Magitup, Pallinup River) has the throat and breast more heavily spotted than an average *maculatus*; however, in the type of *condoni* the under parts are supposedly more lightly spotted (*vide* Mathews).

Two specimens (♂, ♀) from Israelite Bay (D. L. Serventy) are also rather heavily spotted underneath, but the flanks are more greyish fuscous, less brownish. The entire upper parts and likewise the tail are more greyish. These specimens are exceedingly similar to *mellori*, from South Australia, but perhaps more heavily spotted on the throat. It would not serve any useful purpose to name a population so distinctly intermediate between *condoni* and *mellori*.

Wing, ♂ 54, ♀ 53.5; tail, ♂ 50, ♀ 50.

The range of this race is separated by a wide gap from the South Australian populations (*mellori* from Eyre Peninsula).

Sericornis maculatus mondraini Mathews

Sericornis maculata mondraini Mathews, 1942, *Journ. Roy. Soc. West Australia* 27: 78. Mondrain Island, Recherche Archipelago.

Larger than *maculatus* and without yellow on the under parts. Throat and breast more densely and more extensively spotted than in *maculatus*; breast washed with greyish, not pure white. Sides of breast and flanks grey brown. Rump and upper tail-coverts coloured like the back, not washed with rufous as in *maculatus*; back more greyish. Larger, darker, and more heavily spotted underneath than *balstoni*. Wing, ♂ 60, ♀ 55; tail, ♂ 51.5, ♀ 47.

Two specimens (♂, ♀) from Middle Island, Recherche Archipelago (D. L. Serventy, June 20, 1948; July 15, 1947) are quite similar. The under parts are perhaps a little clearer, more whitish and less heavily spotted. The upper parts are more greyish but this may be due to foxing of the older, Mondrain Island, skin (J. T. Tunney, 1906). The Middle Island birds are in fine fresh plumage. Wing, ♂ 57.5, ♀ 55.5; tail, ♂ 53, ♀ 52.5.

Range. The islands of the Recherche Archipelago. V. N. Serventy (*Australian Geographical Society Reports*, 1 (2) : 21) records the bird from Mondrain, Middle and Salisbury Islands, but no specimens have been collected from the last-named island.

Sericornis maculatus balstoni Ogilvie-Grant

Sericornis maculata balstoni Ogilvie-Grant, 1909, *Bull. Brit. Ornith. Club*, 23: 72. Bernier Island, Sharks Bay.

Sericornis maculatus hartogi Carter, 1916, *Bull. Brit. Ornith. Club*, 37: 6. Dirk Hartog Island, Sharks Bay.

Sericornis maculatus geraldtonensis Mellor, 1921, *South Aust. Ornith.*, 6: 43. Geraldton, Western Australia.

Differs from *maculatus* by lacking all trace of yellow underneath and of olive above. Upper parts a colder, paler and greyer brown. Rump and upper tail-coverts coloured more or less like the back; spotting of throat and breast on the average more reduced; flanks greyer. Black sub-terminal tail bar and white tail-tips averaging wider; white tips on wing-coverts also averaging wider.

Wing, ♂ ad. 51-56, ♀ ad. 48-53; tail, ♂ 47-52, ♀ 43-49.5.

Immatures, like those of *maculatus*, with the pattern on the face, tail and under parts reduced.

Range. Western Australia, from Geraldton to Sharks Bay (Wooramel River). Specimens identified from Geraldton, mouth of Murchison River, Sharks Bay, Peron Peninsula, Dirk Hartog Island, Dorre Island, Bernier Island, Wooramel River.

Considerable individual variation is displayed by the material before us. In the type of *hartogi*, for instance, the spotting of the under parts is rather inconspicuous, but in one of the paratypes it is quite heavy. Specimens from Bernier Island (June) are worn to shreds, such from the Wooramel River (April) are

quite fresh. Two birds from Denham, Sharks Bay (July 23, 1944; August 4, 1943) are badly worn. The season of moult is apparently not the same in all parts of the range, nor perhaps in all years. Old specimens, owing to foxing, are much more brownish above than recently collected ones.

Remarks. The available material does not permit any subdivision of *balstoni*. The few specimens in comparable plumage condition suggest that in birds from Geraldton and the mouth of the Murehison River the spotting of the under parts is rather copious, and reaching far up towards the chin, the marks appear to be streaks rather than spots. Specimens from the northern extremity of the range (Wooramel River) appear indistinguishable. Birds from the Peron Peninsula have a tendency toward having the spots rounder and reaching less far up to the chin, birds from Bernier and Dorre Islands again are more like Geraldton birds. There appears to be no consistent difference between all these populations in the colour of the upper parts, of the face, and of the tail tip.

It is significant that *hartogi*, *geraldtonensis* and *houtmanensis* in their original description were compared only to *maculatus* and not to *balstoni*, with which these names are either synonymous (*hartogi*, *geraldtonensis*), or to which they are at least most closely related (*houtmanensis*).

Sericornis maculatus houtmanensis Zietz

Sericornis maculatus houtmanensis Zietz, 1921. *South Austr. Ornith.*, 6: 44. Houtman's Abrolhos.

Sericornis maculatus fuscipes Alexander, 1922, *Journ. Linn. Soc. London*, 34: 465. Wallaby Island, Houtman's Abrolhos.

Similar to *balstoni*, but bill and legs darker; spotting on throat and breast and perhaps also black marks in the face of the male much reduced; more white on forehead; less white on tips of tail feathers; no yellow on under parts; rump coloured as the back; general coloration of upper parts not clearly different from that of *balstoni*.

Wing, ♂ 51.5, ♀ 47, 48, 50; tail, ♂ 47, ♀ 45, 45.5, 47.

Range. Abrolhos Islands (East and West Wallaby Islands).

We have seen only four skins which are rather too soiled to permit an accurate description of the coloration, as well as three fresh birds (1 ♂, 2 ♀), collected by D. L. Serventy, December 8, 1945, of which at least the male is not fully adult.

FROM FIELD AND STUDY

Strepera versicolor feeding on *Bothriembryon*.—During February, 1952, I was collecting for the Museum in the Ravensthorpe and Hopetoun districts. On one of my field excursions near the Phillips River I disturbed several parties of the Squeaker (*Strepera versicolor*), busily feeding on the ground. Their behaviour attracted my attention. Various individuals would stand with their legs well apart and commence to sweep the debris on